

## **Cavitations Technology**

Hydro Dynamics, Inc. (HDI) has developed a patented technology providing breakthrough benefits for industrial processing of fluids. HDI's product, the ShockWave Power™ Reactor (SPR) utilizes "controlled cavitation" to solve critical problems for customers in numerous industries. The SPR represents a paradigm shift for fluid processing and is truly a next generation industrial technology that allows customers to realize significant cost savings through improved efficiencies, lower capital expenditures, decreased maintenance costs and reduced environmental impact. The SPR has been installed all over the world and is used by several Fortune 500 companies. HDI, founded in 1991, is headquartered in Rome, Georgia, USA.



## ShockWave Power Biodiesel Reactor

The SPR can process low-grade soy, poultry fat and beef tallow without compromising results while producing tremendous savings. The SPR offers numerous advantages over conventional technologies because it can run as a true continuous process or in batch mode. To date we have sold 500 million gallons of biodiesel reactor capacity.

The SPR provides the following benefits:

Lower monoglycerides

- Feedstock flexibility
- True continuous operation
- Potential to lower catalyst
- 1-150 million gallon/year systems
- Highest quality biodiesel

## **Biodiesel SPR**

Standard Package (customization available of metal, elastomers, etc.)



304 Stainless Steel SPR

Max temperature: 400°F
Max pressure: 300 psig
Max flow: 1 to 350 gpm

- TEFC motor rated at 460 VAC, 1800/30 RPM, 60 Hz
- One AC-Drive
- Piping connections with Viton elastomers
- Single cartridge seal with built-in process lubrication
- Explosion-proof thermocouples
- Mounted on methyl ester resistant ainted skid
- Basic instrumentation and control panel
- Training and operations manual.

## Sanitary SPR

Standard Package (customization available of metal, elastomers, etc.)

- 304 Stainless Steel SPR
  - o Max temperature: 300°F
  - o Max pressure: 150 psig
  - o Max flow: 0.1 to 150 gpm
- TEFC motor rated at 460 VAC, 1800 or 3600 RPM, 60 Hz
- CIP Design
- One AC-Drive
- Piping connections with Viton elastomers
- Double cartridge seal
- Mounted on stainless steel skid
- Basic instrumentation and control panel



For more information please visit us <a href="http://www.hydrodynamics.com">http://www.hydrodynamics.com</a>